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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,533	03/30/2001	Toshimichi Minowa	381AS/44307C1	4156

7590 03/03/2003

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EXAMINER

TRAN, DALENA

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 03/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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EXAMINER
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14

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**Commissioner of Patents and Trademarks**

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<b>Office Action Summary</b>	<b>Application No.</b> 09/820,533	<b>Applicant(s)</b> MINOWA ET AL.	
	<b>Examiner</b> Dalena Tran	<b>Art Unit</b> 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### **Notice to Applicant(s)**

1. This application has been examined. Claims 17-32 are pending.
2. Applicant's request for reconsideration of the restriction of the last Office action is persuasive and, therefore, the restriction of that action is withdrawn.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 18 and 24, are rejected under 35 U.S.C. 102(b) as being anticipated by Nakajima et al. (4,591,986).

As per claim 18, Nakajima et al. disclose a method of controlling a vehicle having a first running mode wherein an acceleration / deceleration rate of the vehicle is controlled according to a first target value determined from an accelerator pedal position and a second running mode wherein an acceleration / deceleration rate of the vehicle is controlled according to a second target value determined from at least one environment operating condition ahead of vehicle (see column 4, lines 3-68), when first running mode is changed to second running mode determining a changing over time period from first running mode to second running mode based on a difference between first target value calculated in first running mode and second target value calculated in second running mode (see column 5, lines 1-42), and setting a third target value

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which varies from first target value to second target value in changing over time period (see columns 5-6, lines 43-59).

Claim 24 is an apparatus claim corresponding to method claim 18 above. Therefore, it is rejected for the same rationales set forth as above.

5. Claims 20 and 26, are rejected under 35 U.S.C.102(b) as being anticipated by Morita (5,392,215).

As per claim 20, Morita discloses a method of controlling a vehicle having a first running mode wherein a driving shaft torque of the vehicle is controlled according to a first target value determined from an accelerator pedal position and a second running mode wherein a driving shaft torque of the vehicle is controlled according to a second target value determined from at least one environment operating condition ahead of vehicle (see columns 5-6, lines 25-26), when first running mode is changed to second running mode determining a changing over time period from first running mode to second running mode based on a difference between first target value calculated in first running mode and second target value calculated in second running mode (see columns 8-9, lines 23-3), and setting a third target value which varies from first target value to second target value in changing over time period (see columns 9-10, lines 4-68).

Claim 26 is an apparatus claim corresponding to method claim 20 above. Therefore, it is rejected for the same rationales set forth as above.

6. Claims 30-32, are rejected under 35 U.S.C.102(b) as being anticipated by Etoh (5,048,631).

As per claim 30, Etoh discloses a method of controlling a vehicle having a first running mode wherein a driving force of the vehicle is controlled according to a first target value

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determined from an accelerator pedal position and a second running mode wherein a driving force of the vehicle is controlled according to a second target value determined from at least one environment operating condition ahead of vehicle (see columns 2-3, lines 46-13), when first running mode is changed to second running mode determining a changing over time period from first running mode to second running mode based on a difference between first target value calculated in first running mode and second target value calculated in second running mode (see columns 4-6, lines 16-4), and setting a third target value which varies from first target value to second target value in changing over time period (see columns 3-4, lines 14-2).

As per claims 31-32, Etoh discloses a third running mode wherein the driving force is controlled according to third target value until a difference between the second and third target value becomes a predetermined value (see columns 6-7, lines 5-23).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 19, and 25, are rejected under 35 U.S.C.103(a) as being unpatentable over Nakajima et al. (4,591,986) in view of Togai et al. (5,625,558).

As per claim 19, Nakajima et al. do not disclose an air / fuel ratio of an engine of vehicle. However, Togai et al. disclose the acceleration / deceleration rate of the first running mode is controlled to gradually approach acceleration / deceleration rate of the second running mode by controlling an air / fuel ratio of an engine of vehicle (see columns 17-18, lines 13-27). It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Nakajima et al. by combining the acceleration / deceleration rate of the first running mode is controlled to gradually approach acceleration / deceleration rate of the second running mode by controlling an air / fuel ratio of an engine of vehicle to permit good response acceleration by a driver's simple and reasonable operation by operating an accelerator pedal and also a prompt response even when a sudden load change occurs.

Claim 25 is an apparatus claim corresponding to method claim 19 above. Therefore, it is rejected for the same rationales set forth as above.

9. Claims 21, and 27, are rejected under 35 U.S.C.103(a) as being unpatentable over Morita (5,392,215) in view of Togai et al. (5,625,558).

As per claim 21, Morita do not disclose an air / fuel ratio of an engine of vehicle. However, Togai et al. disclose the driving shaft torque of the first running mode is controlled to gradually approach driving shaft torque of the second running mode by controlling an air / fuel ratio of an engine of vehicle (see columns 39-42, lines 24-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Morita by combining the driving shaft torque of the first running mode is controlled to gradually approach driving shaft torque of the second running mode by controlling an air / fuel ratio of an engine of vehicle to compute an output torque required to achieve the target revolution number.

Claim 27 is an apparatus claim corresponding to method claim 21 above. Therefore, it is rejected for the same rationales set forth as above.

10. Claim 17, is rejected under 35 U.S.C.103(a) as being unpatentable over Etoh (5,048,631) in view of Togai et al. (5,625,558).

As per claim 17, Etoh do not disclose an air / fuel ratio of an engine of vehicle. However, Togai et al. disclose the driving force of the vehicle is controlled to gradually approach driving force of the second running mode by controlling an air / fuel ratio of an engine of vehicle (see columns 21-22, lines 33-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Etoh by combining the driving force of the vehicle is controlled to gradually approach driving force of the second running mode by controlling an air / fuel ratio of an engine of vehicle to maintain the output of engine to prevent an acceleration shock of control unit.

11. Claims 22-23, and 28-29, are rejected under 35 U.S.C.103(a) as being unpatentable over Chakraborty et al. (5,839,534) in view of Togai et al. (5,625,558).

As per claim 22, Chakraborty et al. disclose a method of controlling a vehicle having a first running mode wherein an engine torque of the vehicle is controlled according to a first target value determined from an accelerator pedal position and a second running mode wherein a engine torque of the vehicle is controlled according to a second target value determined from at least one environment operating condition ahead of vehicle (see columns 3-4, lines 43-16), when first running mode is changed to second running mode determining a changing over time period from first running mode to second running mode based on a difference between first target value calculated in first running mode and second target value calculated in second running mode (see columns 4-5, lines 17-45). Chakraborty et al. do not disclose setting a third target value. However, Togai et al. disclose setting a third target value which varies from first target value to second target value in changing over time period (see columns 2-4, lines 23-28; columns



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6-7, lines 14-14; and columns 12-15, lines 5-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Chakraborty et al. by combining setting a third target value which varies from first target value to second target value in changing over time period for adaptive controlling a change in vehicle speed of vehicle control system capable of controlling the engine under different control conditions and under the transitions among the control conditions.

As per claim 23, Togai et al. disclose the target value is controlled to gradually approach second target value by controlling an air / fuel ratio of the engine of vehicle (see columns 4-5, lines 29-41; columns 7-8, lines 15-26; and columns 23-25, lines 52-49).

Claims 28-29 are apparatus claims corresponding to method claims 22-23 above. Therefore, they are rejected for the same rationales set forth as above.

### **Remarks**

12. Applicant's argument filed on 12/19/02 has been fully considered and they are deemed to be persuasive. However, upon updated search, the new ground of rejection has been set forth as above.

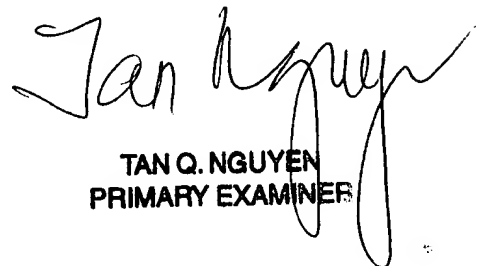
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 701-308-1113.

/dt  
February 21, 2003

  
TAN Q. NGUYEN  
PRIMARY EXAMINER